

INTERVIEW WITH DR. BRINA KESSEL
BY ROGER KAYE JANUARY 22, 2003

MR. KAYE: This is an interview with Dr. Brina Kessel conducted on January 22, 2003 in Fairbanks, Alaska by Roger Kaye. The subject will primarily be a discussion focusing on her involvement with the 1956 Murie Expedition to the Sheenjek River. Dr. Kessel, thank you for being here and doing this with us today. I'd like to ask you to begin with a brief biographical sketch on yourself; where you came from, how you happened to come to Alaska, some of the main things that you have done, and what you do now.

DR. KESSEL: Well, I was brought up on the east coast. I was born in Ithaca, New York where my parents were graduate students. Then my Dad got a job at the University of Connecticut at Storrs. He was an English professor. I was brought up then on a one hundred and ten acre piece of land adjacent to the University. So I was brought up in a University atmosphere, but in a more or less country living atmosphere. Both my Dad and mother had taken Ornithology courses at Cornell under Dr. Arthur Allen. They were both interested in birds and we had feeding stations and things around the place. My Dad would take me out for hikes, identifying birds. I guess that's where my love of birds began. I worked my way through College working on a poultry farm, which also helped me a great deal in my knowledge of birds, believe it or not. I was cleaning dropping boards and things like that. And when I first went up to Cornell, which I did end up at, working with Dr. Arthur Allen, but during my first year up there I earned money as a Freshman working in the Poultry Department there. Then, Dr. Allen and Peter Paul Kellogg were going to come up to Alaska. You may have known their work from out on the Y-K Delta. Dr. Allen and Dr. Peter Paul Kellogg had worked together on the sound recordings of the first bird sound recordings that had been made. I was very fortunate when I went to Cornell that the War was on, and all of the Graduate Students were off in the Service. Even as a freshman vitally interested in Ornithology and hanging around the Labs, I automatically became their "gopher". This gave me an awful lot of good training scientifically, logistically, and that sort of thing while I was there. I don't know why I've always been interested in tundra. I think it must have been a mutant gene that I had. Because as long as I can remember, I have loved particularly, the high alpine type of tundra. I remember it first from the top of Mount Washington. Then, as kids in grade school, my Dad took a sabbatical out to California and we had a trailer that we went across the country in. I can remember at any stop where I was anywhere near the high country that I would either take a horse up, or take a hike up to the top of the tundra. So, when I was looking for a job as I finished my Ph. D., I decided that I would go where there was tundra. Frankly, I would have been out at Nome, had they had a University out there, at that time. I ended up in the Taiga here in Fairbanks. And I told my mother when I came "way up to Alaska" that I would stay for at least two years because I didn't want to be a job hopper. I was up here teaching summer session and Ira Scarlon took us up to Cleary Summit where there was tundra right there at the very tip top. At that summer session picnic, I knew for sure that I was never going to leave Alaska. So, I am

still here. The only place I applied for a job was to come to Alaska. There were probably two reasons for that. I knew that I could be in tundra here, or near it. And a man by the name of Neal Hosley was the head of the Cooperative Wildlife Research Unit at that time. I had put up specimens for him while he was in the Forestry Department at the University of Connecticut. So, I knew him. And my proclivity for tundra, plus having someone that knew me here... so I applied for a job. He told me "no" there wasn't a job at that time. But the next year I went to Milwaukee to the North American Wildlife Conference meetings to try and job-hunt. I met Hosley there and he asked me if I had gotten a job. I told him no, and that I hadn't really been looking. And he told me that they had an opening and that I should send up my stuff. John Buckley, who had just been the second person in the Biology department, had taken the job of Cooperative Wildlife Research Unit when Hosley moved to Dean, which left that position open. So I applied for it, and came up here, so there were two of us in the Biology department at that time.

MR. KAYE: So you were to be a professor, or an assistant professor?

DR. KESSEL: Yeah, I came for summer session as just an instructor because that was all they had in summer session. Then I was immediately in an assistant professor of Zoology, or Biological Science is what I guess they called it at that time. I slowly worked my way up from there. I did a lot of teaching in the early years. And did quite a lot of research around the edges. Then, when Mrs. Schible died in a fire in the Lathrop in about 1967, I guess, I was immediately made acting Department Head. Then, when Dr. Wood came in he reorganized the whole University into Colleges and he made me the Dean of the College of Biological Sciences and Renewable Resources. There was no difficulty. I think it was partly because it was kind of a frontier arrangement up here. The school was very small. It was more who you were, or was more what you could do than you were or what you were. I had absolutely no visible sex discrimination and that sort of thing here around the University. I had some other interesting experiences, which I've told elsewhere. We talked about George Schaller. He was one of my freshman students there. And I got Buckley, the head of the Cooperative Wildlife Research Unit my second year there. He said, "Brina, you should have a research project," it was something to do for the summer. We put in a proposal to the Arctic Naval Research Station. It came through and Tom Cade and I were going to float the Colville, a full boat. Narell was going to fly us up from Umiatt, upriver. Then we were going to coast down and then go back up on. It was all approved, and I got a letter from the boss up there at Narell saying, "Everything is fine. Put in a little more money for photographs, because we'd like to have them". He said that we had one problem. He said, "You can not come up on to the Reserve because the Navy will not allow any woman on the Petfore Reserve unless they are married, and with their husband". So, instead of taking a Ph.D. in Ornithology to do a bird job, they took a freshman man! But his name was George Schaller. I feel that I was able at my misfortune, to kick him along in the right direction. It was a little bit fortuitous as far as his expedition went.

MR. KAYE: You are referring to the Murie Expedition of 1956?

DR. KESSEL: Right, right. In the early 1950's apparently, Otto Geist, and Earnest Patty who was then the President of the University of Alaska recommended me to the Muries for their planned trip to the eastern Brooks Range. I first met the Muries then, in Washington, D. C. at a North American Wildlife Conference in the early 1950's. I think it was 1953. I think that was the year I was able to get to that Conference on a Naval flight, because of my work at Barrow. I know that that is where I met the Muries. I can remember standing in the back of the big conference room and chatting with them for the first time. They were interested because I had been recommended to them. We were going to go up about then, in the early 1950's. But if you recall, Olaus came down with spinal Tuberculosis. He was hospitalized and had to put it off. I remember that when Ira Gabrielson was up here helping with the Statehood document, and so on, he told me, "Forget it, Olaus will never be up here". Spinal T.B. in a man that age was not a very good thing. But he did. [get better] And we went up in 1956. It was interesting because he was still recovering from his Spinal Meningitis. He was still weak. And it was interesting as we were working around up there; there is a lot of tussock country up there and you people with long legs have a definite advantage. You don't have to go down in those pits quite as often. Olaus was magnificent because he was kind of wobbly on his legs when he got up there. And he just kind of managed to wobble between them in the right sequence. It was marvelous to watch him strengthen in the early part of the summer as he became better and better at getting around up there.

MR. KAYE: So, let me ask you; what was your impression of the Muries both as Naturalists, and as people?

DR. KESSEL: Well as people, they absolutely cannot be beat! They were very understanding, sensitive to other people and their weaknesses and strength. Scientifically, Olaus was always a good scientist. And Mardy was his partner in note keeping and taking care of Olaus. I think neither one of them would ever have reached the heights that both of them did of it hadn't been for the other. It was a beautiful partnership that they had.

MR. KAYE: And as a naturalist; what kind of a scientist was he? You had worked with many scientists by then. Did Olaus stand out as different from other scientists?

DR. KESSEL: Only that sometimes Naturalists are not considered Scientists. But he was. He was a Scientist. And he was both. He was wonderful in his observational abilities and his note keeping. I don't know whether you are familiar with the Bulletin on the Birds and Mammals of the Aleutians?

MR. KAYE: The Bering Sea.

DR. KESSEL: Yes, the Bering Sea. It was mostly just the Aleutians they were on. But it's a magnificent thing and you can absolutely depend on it. He was always, he is always in his publications, accurate on everything that he puts in. You can count on his dates. The book that Gabrielson and Lincoln put out on the birds of Alaska; there are a lot of typos in that. And in many places it has been incompletely referenced. But if it's on the Aleutians, you can always go back to Olaus' and pick up those original references and so on.

MR. KAYE: And he was an artist too. Did he do artwork and so on?

DR. KESSEL: Oh yes! I am not sure how much he was doing while he was up there. He was doing sketches. We know that. One picture I am very proud of is in my living room is a picture that he painted as a result of his trip with A. H. Brandt on the Y-K Delta in the 1920's. What's the name of that book? Is it Arctic Alaska by Herbert Brandt, in which he participated with Conover, the Ornithologist? He was down on there while Mardy was here in Fairbanks and when they left after many months on the Y-K Delta. Mardy took the boat down and they met in Anvik, or some place down there where they got married.

MR. KAYE: In 1924.

DR. KESSEL: I have a picture that he painted on my wall at home of Stellers Eiders on the Y-K Delta. It was in their cabin there at Jackson Hole. They gave it to me, which I am very proud of.

MR. KAYE: Some of the descriptions that Olaus made were like a childlike curiosity about the natural world. Did you sense that, or not?

DR. KESSEL: I wouldn't have called it childlike at all. He was just a naturally curious person and scientist. And he loved the outdoors. I don't think he varies that much from other naturalists that I know, and use every excuse to get out in the field, and just plain enjoy it.

MR. KAYE: How about the area. What was your impression of the area when you first went up there? At that time, did you have a sense of the importance of the project in terms of leading to establishment of a protected area?

DR. KESSEL: I personally didn't, particularly. When we, I think it was our first morning at breakfast, Olaus gave us our work papers so to speak. Olaus said "I want you to get the best that you can out of your experiences here this summer". And that was our assignment.

MR. KAYE: Really?

DR. KESSEL: Yeah, and so it was do what you can and what you want to do, and have fun. So, I did birds and plants. George did hiking and birds. We both collected some small mammals. Of course, Olaus was setting some small mammal traps around. We helped put them up. I made quite a plant collection up there. It's in the University of Alaska Herbarium now.

MR. KAYE: When we talked earlier once, you told me about how you apparently went on a walk, or a trip and you hiked into an area that had been off of the topographic maps. And it was a special quality of that experience. What do you remember of that? What can you tell me about it?

DR. KESSEL: Well, I think more what impressed me was that we were in a part of Alaska that had not been mapped by USGS. That was what impressed me. In fact, while we were in the Last Lake camp USGS was up there in a helicopter taking the photographs of that area. And on the east side of this mountain, I guess you'd have to call it a mountain; they were taking the photographs in order to make the USGS maps in future years. But what I had done one day; it was very close to camp. You left the camp and walked a very little distance and you started to climb up in the foothills to that particular mountain. But I went up the valley that was just a little bit south of that. Then there was a valley that ran north and south. So, I then went into that unmapped valley which was just like any other valley up there, with sedges and things in the bottom of it; and rubble on both sides. I walked up there, but I was a little bit disturbed when I met a Grizzly bear. I could see it way down the valley. So I slowly climbed up on the east side of that valley up into the talis, and I tried to remain out of scent and everything else from that bear. I figured that if I was far enough up that talis slope and he started to come up there, I could start rolling rocks and boulders and things down on him. But the bear continued on up where I had been coming. We kind of passed without him seeing me. And then, I walked the rest of the way around the mountain to the north, and then back to camp.

MR. KAYE: You talked about this sense of being off the map, and I guess, this sense of the unknown, and how that added something to the experience?

DR. KESSEL: Well, it did just knowing that we were in an area that hadn't been mapped. When you knew that so much of the area had been mapped, it was kind of fun. One time...I set up a research plot. The head of the Wildlife Cooperative Unit, Dr. John L. Buckley had done some work for the Air Force, or was in the process of making it. They wanted to know what foods that people who might get downed in Alaska could find that would be edible for them to feed on. So he was very scientific about it and randomly picked plots to be surveyed. One of them was way up at the headwaters of the Sheenjek. So, Brina had to go up there and test that one. George and Bob Krear walked up there

with me, and we surveyed the plot and set it out. In the process, we met a Grizzly Bear which you may have read about in Mardy Murie's book, in which it was a hot day and the Grizzly was sleeping there in the woods. Bob Krear was in the lead, George was behind him and I was following George. All of a sudden that Grizzly Bear shot up in front of Bob. He was of course scared witless. He tossed his little tripod at the bear, and it was quite startled. George and I turned around and headed in the other direction. The bear took off. Bob Krear was absolutely white. But anyway, that was on our trip up there to set up that plot at the headwaters. So, when I was going to go up there and run that plot by myself, they walked me up there to make sure everything was all right. I then spent, is it three nights that you run a trap line? I stayed up there alone, way up by the headwaters all by myself for three nights. Then I packed up my stuff and walked down. But I didn't go through the woods. I was walking down mostly the out ice along the edge of the river. I got maybe about a third to a half way down, I was still on out ice, and there were Olaus and Mardy coming up to meet me. So then we walked back together. Actually, we crossed the whole river. We had to take off our boots and pull up our trousers and everything else to get across the water. It was too deep. We finally turned around and came back.

MR. KAYE: Did you folks carry a gun for Bears?

DR. KESSEL: Not most of the time. I carried an over and under .22/.410 with the rifling taken out of the .22 barrel because I wanted to use a .22 shot. You can't get decent pattern out of a rifled barrel. I used that to collect Warblers and that sort of thing. I did carry a couple of single-shot, oh what do you call them, things in the shell?

MR. KAYE: A flare?

DR. KESSEL: I don't know, it looks like a big lead ball in the end of it. But anyway, I would carry one of those in my pack. The bears were more likely to avoid us than we had to avoid bears. It was just that one instance that we were worried about. There was another one that I think Mardy tells about. I was nearby. That was when a bear was coming down the hill, and it appeared to be chasing Bob Krear. So he dropped his pack, it stopped at the pack. Then Bob came on down. He went back later and picked up his pack. You had to be careful. I am not sure we were careful enough! We didn't have any really bad accidents.

MR. KAYE: You mentioned George Schaller, and of course he was one of your students. Is there anything that indicated at the time; any of his traits as a biologist or a student that would lead one to think that he'd become the preeminent conservation biologist, kind of world known as he is today?

DR. KESSEL: I don't think there was at that time. He was very interested in natural history. I remember he had, I think a Raven at one time, that he kept over near the

Dormitory or maybe even in the Dormitory. But no, I think that probably the Colville River was his first experience in that. When he went up with Tom Cabe to work on the birds of the Colville. He really enjoyed that very, very much. And that was probably his kick-off. Then, to have the additional opportunity to be with the Muries on the Sheenjek, I think that much more of a boost. He loved to walk. He would leave camp and be gone for two or three days, just walking the ridges around there. I remember one trip that he took, where he went on the ridges on the eastern side of the Sheenjek all the way up and around the headwaters where he would look over into the Colleen. Then, he walked around and came down the other side and came back to camp. I know that he wore out at least two pairs of shoepacks. We had to order more for him from Fort Yukon! I don't know whether I answered your question there or not.

Here's something from my notes that make me chuckle when I reread them. We arrived up there on the first of June. I think the two fellows, Kreer and Schaller went up there on the preceding day and the Muries and I went up on the first. On the morning of June 2nd, I wrote in my journal, "had a horrible sleep last night. I was pretty cold. It didn't seem possible. I had flannel PJs on. I was inside both of my double down bags. I had a blanket over that. Most of the trouble came from below. Anything that touched the ground hard got cooled off in no time. It must have been the frost in the ground. Today I cut some bows and put a layer of them under the tent floor below my air mattress. Then I put my blanket, doubled, between my sleeping bag and mattress. Let's hope I am warmer tonight." And sure enough, I was. That was probably one of my first lessons that I learned about Arctic camping. I had the same trouble on the Seward Peninsula when I got stranded with the lack of an airplane at the town of Dearing. Again, it was that cold. They had some Caribou skins all stacked in a rack. I guess they were going to send them out and have them tanned, I don't know what. Anyway, I asked if I could barrow one of those and I through it on the ground underneath my sleeping bag. Of course, I was nice and warm. To this day, I have that lying on one of my beds upstairs, just in case I ever have to use it again. But that's just an example of the kind of thing I learned up there.

At another place in my journal, I was writing about how wonderful the area was and what nice weather we were having. "The mosquitoes are still scarce, even while sitting in that damp area I only had two or three bothering me at a time. I did have a few 'noseeums' around me today however. I am afraid that this environment is too good to last. Gorgeous beyond words. The birds are just getting started on nesting. The Caribou are migrating. Everything seems perfect, it's hard to believe that I am here. Why should I have been chosen to come on a trip like this, out of the many persons that applied. Now that I am here, I feel woefully inadequate to fully appreciate everything and to make full use of the opportunities provided. I am not sure how best to spend my time; what information to gather, how to gather it, etc. It's easy to lay plans in the laboratory, it's another thing to fully utilize, synthesize and appreciate this great outdoor laboratory."

So that was part of my learning experience, my early learning experience about working away from real civilization.

MR. KAYE: It's interesting, you use the word 'laboratory' there. When I look in the early writings, the Muries and others use that word for this place because it could become and remain a laboratory of natural process, a place where scientist of the future (today) could go back and see how nature works where it isn't altered. Is that a sense that you had at that time? Or, is that a later value?

DR. KESSEL: I don't think it did. No, I was too full of all of the new experiences and studying the distribution of birds and which birds where there, their relationship to the particular vegetation, the distribution of vegetation relative to elevation and wind exposure, ground moisture and that sort of thing. I think I was too full of the smaller things, rather than looking at the big overall picture quite so much.

MR. KAYE: Earlier, you told me that looking back later, you realized a few things that you hadn't when you were younger back in 1956. One of the things you mentioned was that you realized "how much wilderness has meant to me."

DR. KESSEL: Oh yeah! As I look back, right now even, I find that my best memories were when I was out in the wilderness and essentially alone. That time when I went up and ran the plots up at the headwaters of the Sheenjek and I was all alone. I loved it. It was one of the first times that I sat down and put that feeling on paper. I experienced that same type of thing later, up on the Seward Peninsula while I was working on the birds of the Seward Peninsula. It happened one year particularly, when this chap from the University of Syracuse, he was an M.D., but he was good Ornithologist. He had come up and worked with me one summer for a two or three week period. He was going to come up again. The day before I left for the Seward Peninsula, or a few days before, he called and he was lying flat on his back from a twisted back. He couldn't move. I said to myself, after being a little upset about it, "well heck, the plans are all laid, I'll just go!" So I did. This was the year that we were going to study the northern part of the Seward Peninsula. If you know the road system out there, it's doesn't extend to the northern peninsula. It's all in the south part. I had made contact with a pilot from Teller, who was a wonderful pilot and knew where all of the airstrips were, or where the high country was so he didn't need an airstrip. I would just point to places on the map that I thought would be good to get to on the northern half of the peninsula. I hadn't been able to study the western, north half. He would take me out and drop me off at an old airstrip at Air Mountain. He'd leave me for three or four days and then fly in and pick me up and take me to the next place and the next place. So, I was by myself most of that summer watching him leave me and wondering whether he was ever going to come back again! He always did! That was my other experience with real wilderness. There was another time, I think it was on that same trip, in which I went and the natives from Wales boated me up around the outside of Lop Lagoon. They dropped me off at the top of the lagoon and

they were supposed to come up and run a Caribou herding operation back down to Wales Village. Again, I enjoyed it in the same way. But they never came. They went on, and on and on. They were just plain unreliable. They finally did, but I think I probably spent a week more that I was supposed to up there waiting for these people to come pick me up. But that's not part of the Sheenjek. It was part of the wilderness experience in many ways.

MR. KAYE: It's interesting that sometimes it's only when you look back that you see what it meant to you.

DR. KESSEL: Oh, I think so! It took me until very recent years 'til I realized that these situations are where I've been most content and happy in my life. Out there just contemplating the tundra, I guess.

MR. KAYE: Given that, what qualities of the Arctic Refuge, maybe the Upper Sheenjek, ought the Agency pay attention to maintaining to provide that kind of experience?

DR. KESSEL: Well, I think as much as possible, to keep mechanical things out of it. I mean, we were there on the Last Lake and we heard, I think it was the Governor at that time. He wanted to make a trail from Fort Yukon up to the north slope(?).

MR. KAYE: The Dew Line Trail.

DR. KESSEL: Yeah. And we heard this horrible noise down there in the river. We thought "Oh my gosh, are they really surveying that?" It turned out to be a herd of Caribou coming down there. And their hoofs on that gravel sounded for all the world like a CAT coming down there. I think it kind of scared us all, which is the reason for my comment here. You don't want those kinds of sounds because it's a contamination of the acoustical environment around there. The sounds of the peace and quiet are just as important as the visual aspects of the distance and the undisturbed plants and animals and things.

MR. KAYE: I wonder if perhaps that would violate what Olaus was constantly referencing as the 'intangible' aspect of wilderness?

DR. KESSEL: Oh, I'm sure! I am sure that that is part of it. The Arctic Refuge, or the North Slope there where we are fighting the oil people, they have no idea what wilderness is. You hear them talk about 'one derrick', and 'one small pad', and how it's such a small percentage of the range, 'it won't bother the Caribou'. But it will bother people. For anyone that knows or feels anything about wilderness. You couldn't go to the top of the ridge and look down towards the Beaufort Sea and see a derrick down there and think you are in wilderness. It would have lost everything for you. There's a family that was up here some time in the early 1960's I think. They are all six foot three or fours. There

were three boys and Daddy. They walked up to the top of the ridge and down the other side where they were picked up. I saw him at a meeting here about four years ago and asked him, “what would you have thought if you came up on that top and looked over and across and saw a derrick down there?” He practically blanched white at the thought!

MR. KAYE: Did your experience up in the Arctic Refuge or perhaps with the Muries, working with them, influence the course of your career or your later perspectives?

DR. KESSEL: Certainly not the course of my career. What it did do was to make it so that I felt comfortable out in the wilds, by myself, with no fear what so ever. There was a competency that I could take care of myself and enjoy it. I am sure that it came from the training that Mardy gave me around the camp. As I have said many times, she certainly knows how to make a camp a home. She knew what tasted good to people in the field. I don’t know whether you realize it, you probably do, how different your appetite is in the field than it is at home. I have brought certain items home from camp, put them on the shelf and never looked at them again! But Mardy knew what was good in camp. She always had enough candy bars up there. We had a cook stove in which she baked up Logan bread, and also some of Lois Crisler’s food and things that we would have in camp.

MR. KAYE: Did you meet the Crislers?

DR. KESSEL: No, I never have. I don’t think I have.

MR. KAYE: You mention Mardy Murie. Many people know of her work in the 1970s and 1980s, being a particularly strong spokesperson and leader for wilderness. But I have also heard that that isn’t the role that she really assumed until after Olaus died. Was that your sense at that time?

DR. KESSEL: Well, no, because I didn’t know the future. But Olaus leaned on her tremendously. I think in many ways she was the strength of the two. She probably encouraged him to reach some of these heights in the Wilderness Society and that sort of thing, more than he might have without her. As I said, both of them served to strengthen each other in their relationships.

MR. KAYE: Do you recall when Olaus and Mardy came up in 1957 to basically do advocacy for the Arctic Refuge? Do you recall how they related to people in Fairbanks?

DR. KESSEL: No, I don’t.

MR. KAYE: Did you see them that year when they came back?

DR. KESSEL: I can’t remember.

MR. KAYE: While you were up there, I know a few Indians from Arctic Village visited your camp. One of them was David Peter who is the grandfather of a woman who works here, coincidentally. But I am wondering, do you happen to know how it was that they visited you folks, and how they interacted with the group? Did they understand what it was that you were up there for?

DR. KESSEL: I think that they knew we were there, and they came up on one of their regular hunting trips and knew that they were close to us. They somehow got across the river and came over to see us. But that's all I really...I don't think...I don't know about if they knew what we were doing or anything. Olaus spent a lot of time talking with them. I remember that they sat on one of our gasoline cans while Olaus was skinning small mammals on one of those blaseobars[sic].

MR. KAYE: One final question; What are your thoughts about the Arctic Refuge? Your hopes for it's future and what it ought to remain, or perhaps what it ought to become?

DR. KESSEL: I think that it is tremendously important that it remains in it's present state for years to come because it's the only really good wilderness area that the US has, in the Arctic anyway, and undisturbed area, period. For that alone, I think it should be preserved, and be preserved as a wilderness area. People that don't understand wilderness think that you can put an oil derrick down in the middle of the coastal plain. Certainly its not going to bother the swans that stage up there. And it's not going to bother the Caribou up there. But visually, it takes away the complete concept of wilderness, the kind of wilderness that I think is captivating to anybody that has used it, or utilized it, I should say. I think it's important that in preserving the wilderness aspect of the whole refuge, that we should not allow ground mechanical vehicles on it. I think we have to avoid things like four-wheelers. Even snow machines, unless there is a good snow cover, should be avoided. Snow machiners don't pay much attention. Once they get access to an area, I am really worried about the problem that the Park Service is having now with snow machiners thinking that they should be able to use all of McKinley National Park to go scooting around. They've got the Denali Highway, and they make a mess of that. They just don't pay any attention to what they are doing. They are just out for the thrills, and that sort of thing. That sort of mechanized transportation, I think, should be disallowed on the refuge. Planes flying over it, and landing on the lakes in pontoons and so on, I think that's fine so long as they take out their own garbage and that sort of thing. Those are the only things that come to the top of my mind right now, but definitely it should be preserved. There's not enough oil up there to make it worth putting in the pipeline. I never told you that I had to work in Washington to counter the Arctic Gas Pipeline. I was supporting the route that goes up the Tanana. My feeling was that the oil people wanted to put down that pipeline across the north to go down the McKenzie so that it would give them access to the oil on the Arctic National Wildlife Range. Well, we won that one, but I think they are still trying!

MR. KAYE: I want to thank you for your time and insights.

DR. KESSEL: My pleasure, if it does some good!